IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Shunsuke KUROIWA, et al.

Serial Number: 10/583,126 Group Art Unit: 1624

Filed: June 6, 2005 Examiner: Jaisle, Cecilia M.

Confirmation No.: 2218

For: 3-PHENYL-CINNOLINE ANALOGUE AND ANTITUMOR AGENT USING THE SAME

DECLARATION UNDER 37 CFR § 1.132

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner For Patents P.O. Box 1450, Alexandria, VA 22313-1450.

on August 11, 2008 (Date)

Kevin S. Lemack

Name of applicant, assignee, or Registered Representative

Signature

August 11, 2008

Date

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

I, Shunsuke KUROIWA, a Japanese citizen, residing at 2138-9, Ishihara, Kumagaya-shi, Saitama, 360-0816, Japan, do hereby solemnly and sincerely declare that:

I am over the age of eighteen and legally competent to assert this declaration.

I am a co-inventor of the subject matters claimed in U.S. Patent Application No. 10/538,126.

I have studied a final Office Action mailed May 14, 2008 on the above-identified application. I understand that claim 15 is rejected under 35 USC 103(a)

over Altomare, et al. (J. Med. Chem., 1998, 41, pp.3812-3820).

This Declaration is being submitted for the purpose of demonstrating that Altomare et al. fail to teach or suggest that the claimed compound of the present invention, which is characterized in that the compound has a substituted 3-phenylpridazine structure and a substituent at 5-position in the molecule, has effectively an proliferation inhibition activity on mammary cell.

EXPERIMENTS

Methods

According to the same methods as in Test Example 1 of the present specification, the comparative experiments were conducted to compare the compound of Example 66 of the present specification with Compounds A and B described in Table 1 below in the inhibition activity on mammary cell such as MCF-7 and MDA-MB-453.

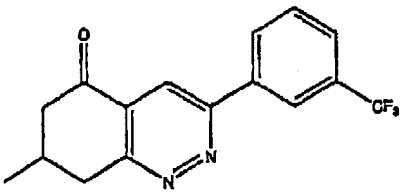
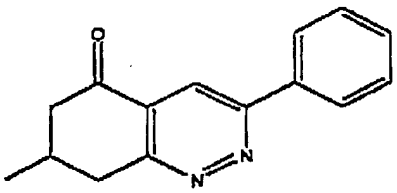
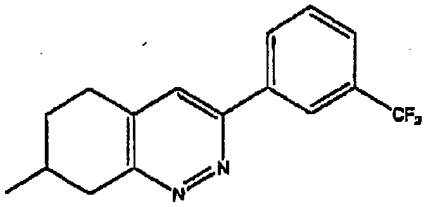
Compound A has an unsubstituted 3-phenylpyridazine structure in the molecule, similarly to the compounds of formulae 28 and 29 of Altomare et al.

Compound B has no substituent at the 5-position in the molecule, similarly to the compound of formula 26 of Altomare et al.

Results

The obtained results are shown in Table 1 below.

Table 1

Compound	Inhibition Activity MCF-7	Inhibition Activity MDA-MB-453
Compound of Example 66 of the specification 	0.05	1.26
Compound A 	>10	>10
Compound B 	1.0	>10

Considerations

As can be seen from the results of Table 1, the inhibition activities of Compounds A and B on mammary tumor cell are less potent than that of the compound of Example 66 of the specification.

Therefore, the above results indicate that Compounds A and B, which are similar to the compounds 29, 28 and 26 of Altomare et al. in the chemical structure, have less potent inhibition activity on mammary tumor cell than the compound of Example 66 of the specification.

That is, the above results show that the substituted 3-phenylpyridazine structure and the substituent at the 5-position, which the claimed compound of the present invention has, are required for high inhibition activity on mammary tumor cell.

Altomare et al. neither teach nor suggest that the substituted 3-phenylpyridazine structure and the substituent at the 5-position, which the claimed compound of the present invention has, are required for high inhibition activity on mammary tumor cell.

Consequently, Altomare et al. fail to teach or suggest the claimed compound of the present invention and the pharmacological effect thereof.

Thus, I believe that the claimed invention should be unobvious over Altomare et al.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signed this 7th day of August, 2008.

Shunsuke Kuroiwa

Shunsuke KUROIWA